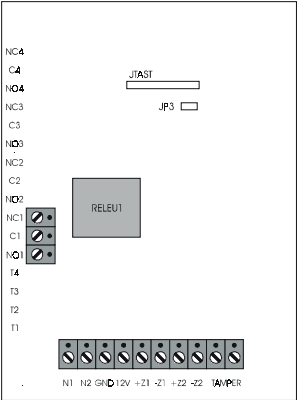


up will be:

- master code becomes 000000
- the keypad works in monostable mode
- the relay activation time is 5s.
- "RETEA" LED stays lit.

9. CONNECTORS' SIGNIFICANCE



- Pin NO1 relay
- Pin C1 relay
- Pin NC1 relay
- Pin N1 (not used)
- Pin N2 (not used)
- Pin GND connected to GND
- Pin 12V connected to +12V DC
- Pin +Z1 connected to "Request to exit" button
- Pin -Z1 connected to "Request to exit" button
- Pin +Z2 (not used)
- Pin -Z2 (not used)
- TAMPER pins should be connected to the alarm system

VERY IMPORTANT:

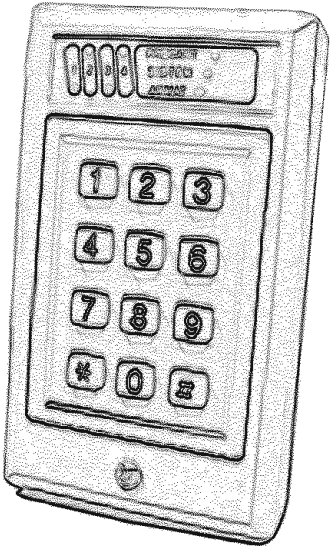
For the electromagnetic lock, a 1N4005 diode should be connected as close as possible to the lock's coil (if powered in DC) or a varistor (if powered in AC).

APENDIX

PROGRAMMING OPTIONS SUMMARY

**** (MASTER CODE) # 1 # (ADDRESS) # (NEW CODE) #	MODIFY/ Add CODE
**** (MASTER CODE) # 2 # (ADDRESS) #	ERASE USER CODE
**** (MASTER CODE) # 3 # (TIME) #	PROGRAMMING RELAY'S ACTIVATING TIME
**** (MASTER CODE) # 0 #	RESET USERS CODES

USER'S MANUAL
KP 2M KEYPAD



1. FEATURES:

- 60 users
- 1 relay output
- 1 NO trigger input for "Request-to-exit" button.
- 2 operating modes for relay: monostable / bistable
- Programming and operation assisted by visible and audible signals

1.1 CODES

KP2M can learn up to 60 user codes and 1 master code. All the 61 codes may be programmed. **The default master code este 000000.** Each code may have up to 1-6 digits between 0-9, and for the same code, the same digit may occur more than once.

1.2 THE RELAY

The keypad has a relay that may work either in monostable mode or in bistable mode. The activation time for this relay is programmable. The timing may be up to 1-99 s. (in monostable mode). The value 0 means the relay is in bistable mode.

1.3 TRIGGER INPUT

This is a NO command input for the relay. On this input one may connect a "Request-to-exit" button.

1.4 PROGRAMMING

While in programming mode, one may set:

- 1 master code
- 60 user codes
- relay's activation time
- operating mode (monostable / bistable)

2. LED'S SIGNIFICANCE

LED	POSITION	SIGNIFICANCE
green LED	left	relay state
green LED	right	power on
red LED	right	alarm state
yellow LED	right	programming mode

The yellow LED witnesses the programming mode.

3. AUDIBLE SIGNALS SIGNIFICANCE

SIGNAL	SIGNIFICANCE
1 short signal	key pressed
3 short signals	valid code
2 short signals	enter into programming mode
1 long signal	invalid code

4. OPERATING MODES

4.1 MONOSTABLE MODE

Upon keying in a valid code, or when the trigger input activates, the relay programmed as monostable will activate for the programmed period of time (1 - 99s). While the relay is still activated, one may key in another code. The relay timing may be extended to the double of the programmed period.

4.2 BISTABLE MODE

Upon keying in a valid code, or when the trigger input activates, the relay will activate and will maintain this state until a valid code is entered.

5. CODES ENTER

A code may have 1-6 digits (0-9). The code enter should always be followed by the key " # ". So, to enter a code do the following:

digit [digit digit digit digit digit] #

Pressing " * " key while entering a code is cancelling the digit pressed previously (it is the same effect as

Esc key on a PC keyboard). The entered codes may be classified as **master code** and **users codes**. The master code, comparing to the users codes, may program the keypad. The master code is always the code with the address 0 and may be modified but not erased. A valid code entry is signaled by three short beeps. An invalid code entry is signaled by a long beep (approximately 1s.).

6. NOTES

1. The default master code is 000000.
2. The master code is always the code with the address 0.
3. The master code allows the access to the programming mode.
4. All codes entries must be followed by # key.
5. Codes have 1-6 digits; into the same code the digits may repeat.
6. In case the master code is forgotten or doesn't seem to work, the keypad may be set to default (see chapter "SYSTEM SET UP TO DEFAULT").
7. 2 short beeps confirm the enter in programming mode.
8. To enter programming mode press: **** (master code) #
9. To exit programming mode press " * " .

7. PROGRAMMING

The programming menu has the following options:

1. key 1 followed by # modify/add new codes
 2. key 2 followed by # erase user codes
 3. key 3 followed by # set relay activating time
 4. key 0 followed by # reset all user codes
- In the following:
- the items to be set are in **bold** .
 - the procedure is written in normal type style.
 - the effect is in *italics*.

7.1 CODES PROGRAMMING:

YELLOW LED

1. TO ENTER THE PROGRAMMING MENU

press **** (master code) # *blinks slowly + 2 beep's*
the menu option is expected to be entered

to exit programming mode press *

2. TO ADD CODES

press 1 # *blinks fast*
codes address is expected: 0-60

to go back to step 1press *

3. ADDRESS ENTER

press (address) # *blinks slowly*
new code is expected to be entered

to go back to step 1press *

NOTE: If the entered address is wrong and the # key was not yet pressed, the correct address may be entered. Upon pressing the # key, the last two entered digits will be considered.

4. KEY IN THE NEW CODE

press (new code) # *blinks fast*
goes back to previous step

NOTE: If the entered code is wrong and the # key was not yet pressed, the new code may be entered subsequently.

7.2 ERASING USER CODES

YELLOW LED

1. TO ENTER THE PROGRAMMING MENU

press **** (master code) # *blinks slowly+ 2 beep's*
the menu option is expected to be entered

to exit programming mode press *

2. ERASING CODES OPTION

press 2 # *blinks fast*
codes address is expected: 0-60

to go back to step 1press *

NOTE: the address 0 is ignored.

3. ADDRESS ENTER

press (address) # *blinks slowly*

goes back to previous step

NOTE: If the entered address is wrong and the # key was not yet pressed, the correct address may be entered. Upon pressing the # key, the last two entered digits will be considered.

7.3 PROGRAMMING THE RELAY ACTIVATION TIME

YELLOW LED

1. TO ENTER THE PROGRAMMING MENU

press **** (master code) # *blinks slowly+ 2 beep's*
the menu option is expected to be entered

to exit programming mode press *

2. THE OPTION PROGRAMS THE RELAY ACTIVATION TIME

press 3# *blinks slowly*
keypad waits for the desired time (0-99s) to be entered

to go back to step 1press *

3. ENTER THE DESIRED TIME

press (time) # *blinks slowly*
goes back to previous step

NOTE: If the entered value is wrong and the # key was not yet pressed, the correct value may be entered. Upon pressing the # key, the last two entered digits will be considered. The time should not always be entered as 2 digits. Ex: to set the time for 5 s., one may press simply: 5 #. If the activation time is set to 0, the relay is set as bistable. Any other value, different from 0, sets the relay as monostable.

7.4 USERS CODES RESET

YELLOW LED

1. TO ENTER THE PROGRAMMING MENU

press **** (master code) # *blinks slowly+2 beep's*
the menu option is expected to be entered

to exit programming mode press *

2. ERASING CODES OPTION

press 0 # *blinks slowly*
goes back to previous step

8. SYSTEM SET UP TO DEFAULT

When the master code is forgotten or it doesn't seem to work the keypad may be set up to default as follows:

1. power off the keypad.
2. open the case .
3. short cut (close) JP3 jumper
4. power on the keypad; all the LED's will be lit.
5. press the * key, subsequently, five times. Any other key pressed cancel the set up to default procedure.
6. open the JP3 jumper. The default values set